

IN THE SPECIFICATION

- At page 2, line 8, please replace three (3) paragraphs (Publ. App. pars. [0005]-[0007]) starting with the paragraph beginning, “Using the characteristic values from the characteristic value extraction unit 3 . . .” with the following amended paragraphs:

Using the characteristic values from the characteristic value extraction unit 3, the matching unit 4 speech-recognizes the speech input to the microphone 1 (input speech) based on, for example, the continuous distribution ~~(HIGH MOLECULAR MATERIALS)~~ Hidden Markov Model, as it references an acoustic model database 5, a dictionary database 6 and a grammar database 7 as necessary.

That is, the acoustic model database 5 memorizes an acoustic model, representing acoustic features, such as each phoneme or syllable in the language of the speech being recognized. Since here the speech recognition is based on the continuous distribution ~~HIGH MOLECULAR MATERIALS~~ Hidden Markov Model method, the acoustic model used is the ~~HIGH MOLECULAR MATERIALS~~ [[Q]]Hidden Markov Model[D]]. The dictionary database 6 memorizes a word dictionary stating the information on the pronunciation (phonemic information) for each word (vocabulary) being recognized. The grammar database 7 memorizes a set of grammatical rules (language models) stating how the words registered in the word dictionary of the dictionary database 6 are linked together. As the set of the grammatical rules, those rules which are based on the context free grammar (CFG) or a statistic word link probability (N-gram), for example, may be used.

The matching unit 4 references the word dictionary of the dictionary database 6 to connect to the acoustic model stored in the acoustic model database 5 to construct an acoustic model of the word (word model). The matching unit 4 also references the grammatical rules

stored in the grammar database 7 to couple several word models and, using the so-connected word models, recognizes the speech input to the microphone 1, based on the characteristic values, in accordance with the continuous distribution ~~HIGH MOLECULAR MATERIALS~~ Hidden Markov Model method. That is, the matching unit 4 detects a sequence of word models, having the maximum score (likeliness) of observation of the characteristic values of the time sequence output by the characteristic value extraction unit 3 and outputs a sequence of words corresponding to the sequence of the word models as the recognized results of the speech.

- At page 4, line 12, please replace the paragraph (Publ. App. par. [0010]) beginning, “That is, if, for example, the HIGH MOLECULAR MATERIALS method is applied . . .” with the following amended paragraph:

That is, if, for example, the ~~HIGH MOLECULAR MATERIALS~~ Hidden Markov Model method is applied, the acoustic model is calculated, from word to word, from the acoustic model forming the word model, based on the probability of observation (probability of occurrence) of the sequence of f characteristic values output by the feature extraction unit 3. If a bi-gram is applied, the language score is found based on the probability of concatenation (coupling) of a word under consideration and a word directly previous thereto. The result of speech recognition is finalized based on the final score obtained on comprehensive evaluation of the acoustic score and the language score for each word.